

WHAT IS CLAIMED IS:

5 1. A vent assembly for a housing filled with a lubricating fluid and accommodating a gear mechanism, said vent assembly comprising:

 a hollow casing including a continuous side wall having at least one hole there through, the hollow casing
10 having an opening formed in a lower portion thereof; and
 a vent tube extending within said hollow casing so as to form a cavity between an inner peripheral surface of said casing and an outer peripheral surface of said vent tube, said vent tube having a first open end disposed
15 within said hollow casing and a second end extending outside said casing in communication with an external environment.

 2. The vent assembly according to claim 1, wherein
20 said vent tube and said hollow casing are substantially cylindrical and said cavity is between said casing and tube is substantially annular.

 3. The vent assembly according to claim 1, wherein
25 said first open end of said vent tube is beveled with

respect to a length thereof and defining a long side and a short side along a longitudinal length of said vent, said at least one hole through said sidewall of said casing being located on a longitudinal first side portion of said casing adjacent said long side of said vent tube.

4. The vent according to claim 3, wherein said at least one hole through said sidewall includes two holes longitudinally spaced apart and longitudinally coextensive along said first side portion of said casing.

5. The vent assembly according to claim 1, wherein said second end of said vent tube is formed with an external retention surface to facilitate a sealed connection to an extension member.

6. The vent assembly according to claim 1, wherein said hollow casing includes a top end wall substantially closing said casing, said vent tube being connected to and at least partially extending through said top wall.

7. A vent assembly in combination with a gear housing filled with a lubricating fluid and accommodating a gear mechanism, said vent assembly comprising:

a hollow casing secured substantially within said housing, said casing including a continuous side wall having at least one hole there through and terminating at a lower portion having an opening to facilitate return of entrained lubricant to said gear housing; and

a vent tube extending within said hollow casing so as to form a cavity between an inner peripheral surface of said casing and an outer peripheral surface of said vent tube, said vent tube having a first open end disposed within said hollow casing and a second end extending outside said casing and in communication with an external environment relative to said gear housing.

8. The combination according to claim 7, wherein a substantial portion of said casing is disposed in a recessed cavity formed in an inner surface of said axle housing

9. The combination according to 7, wherein said hollow casing includes a substantially flat top end wall substantially closing said casing, said top end wall having a peripheral surface extending beyond said side wall substantially about a periphery of said vent tube.

10. The combination according to claim 9, wherein said peripheral surface engages an external surface of said axle housing, said vent tube being connected to and extending through said top wall and a bore formed in said external surface of said axle housing.

11. The vent assembly according to claim 1, wherein said vent tube is non-truncated such that said first open end is obliquely formed and thereby defines a long side and a short side of said vent tube within said casing, said at least one hole through said sidewall of said casing being located on a longitudinal first side portion of said casing adjacent said long side of said vent tube.

12. The combination according to claim 7, wherein said vent tube and said hollow casing are substantially cylindrical and said cavity is between said casing and tube is substantially annular.

13. The combination according to claim 7, wherein said first open end of said vent tube is beveled with respect to a length thereof and defining a long side and a short side along a longitudinal length of said vent, said at least one hole through said sidewall of said casing being located on

a longitudinal first side portion of said casing adjacent
said long side of said vent tube.

14. The combination according to claim 13, wherein
5 said at least one hole through said sidewall includes two
holes longitudinally spaced apart and longitudinally
coextensive along said first side portion of said casing.

15. The combination according to claim 7, wherein said
10 second end of said vent tube is formed with an external
retention surface to facilitate a sealed connection to an
extension member.

16. The combination according to claim 7, wherein said
15 hollow casing includes a top end wall substantially closing
said casing, said vent tube being connected to and at least
partially extending through said top wall.

17. The combination according to claim 7, wherein said vent
20 rube is non-truncated such that said first open end is
obliquely formed and thereby defining a long side and a
short side of said vent tube within said casing, said at
least one hole through said sidewall of said casing being

located on a longitudinal first side portion of said casing adjacent said long side of said vent tube.

18. The combination according to claim 17, wherein
5 said at least one hole through said sidewall includes two holes longitudinally spaced apart and longitudinally coextensive along said first side portion of said casing.

19. The vent assembly according to claim 1, wherein said
10 hollow casing includes a bottom wall substantially closing said hollow casing, said opening defined by a hole extending through said bottom wall to facilitate return of entrained lubricant to said gear housing.

15 20. The combination according to claim 7, wherein said hollow casing includes a bottom wall substantially closing said hollow casing, said opening defined by a hole extending through said bottom wall to facilitate return of entrained lubricant to said gear housing.

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